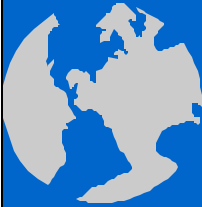# The State of
Biometrics Security Assurance

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Security Assurance Defined

- Categorization of the security level of a biometric system used to enforce physical security or logical access
- Provides a level of confidence that the device can be used to achieve the intended security

Matt King

The Importance of Biometrics Security Assurance

- Without security assurance, the main goal of biometrics may be defeated!
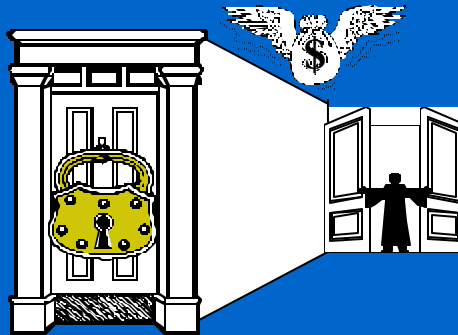
Achieving Security Assurance

- Assurance can be achieved through analysis and testing
  - Requirements analysis & definition
  - Validation claims
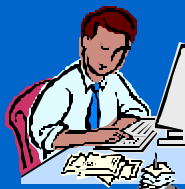 - Functional testing
  - Security testing

Requirements Analysis & Definition

- Helps users understand their own requirements
- Helps vendors understand user requirements
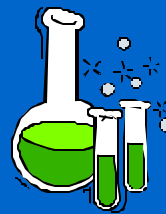- Formal standards help with requirements development
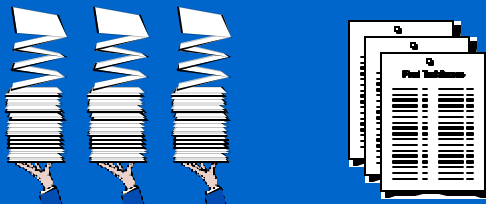
Claim Validation

- Ensures products act as users *and* vendors expect
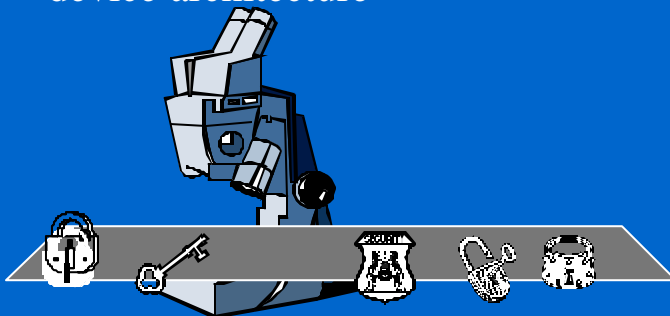- Product capabilities clearly defined

Functional Testing

- Tests normal product functions, such as
  - Installation functions
  - Data capture functions
  - System interaction functions

Security Testing

- Validation that the device is secure
- Identifies and evaluates weaknesses in the device architecture

Current Assurance Activities

- Biometric Consortium - Interoperability, Performance, and Assurance Working Group
- Biometrics Management Office (BMO)
- United Kingdom's Biometric Working Group (BWG)

Biometric Consortium

- Interoperability, Performance, and *Assurance* Working Group
  - A forum to discuss and evaluate assurance efforts from various sources
  - Goal of leveraging assurance efforts against each other

Biometrics Management Office

- A focal point for DoD biometrics activities
- Includes the Biometric Fusion Center (BFC), which is used for test and evaluation of biometric products
- Coordinating the development of Biometric Protection Profiles

Biometric Working Group

- A forum for UK and European test and evaluation efforts
  - Biometrics Device Protection Profile
  - Biometrics Evaluation Methodology Working Group

CESG

The Future of Biometrics Assurance

- Similar activities will continue to converge in the appropriate forums
- Security assurance issues discussions are increasingly more frequent in standards groups
- Specifications and protocols will be developed by or submitted to standards groups